Long Island Botanical Society

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Prunus speciosa (Rosaceae): A newly recorded tree species naturalizing in New York

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Prunus speciosa (Koidzumi) Nakai, commonly known as Oshima Cherry and Oriental Cherry (Fig. 1), is a newly recorded species naturalizing in New York and was added to the New York Flora Atlas in November 2023 (based on specimens submitted by the author at BH & NY #1254, 1258, 1259, 1641, 1642, 1643, 1644, 1646, 1647, 1652, 1654, and 1661). Due to its similar appearance to some other Asian ornamental horticultural species, *P. speciosa* has probably been overlooked in the field in New York. *Prunus speciosa* can be confused with *P. serrulata* and *P. avium* but differs because *P. speciosa* has single flowers, glabrous abaxial leaf surfaces, aristate marginal teeth, tubular hypanthium and lanceolate sepals. *Prunus serrulata* has double flowers which are usually pink. *Prunus avium* can be separated from *P. speciosa* by its hairy abaxial leaf surfaces, blunt marginal teeth, urceolate hypanthium, and strongly reflexed oblong sepals (Fig. 2).

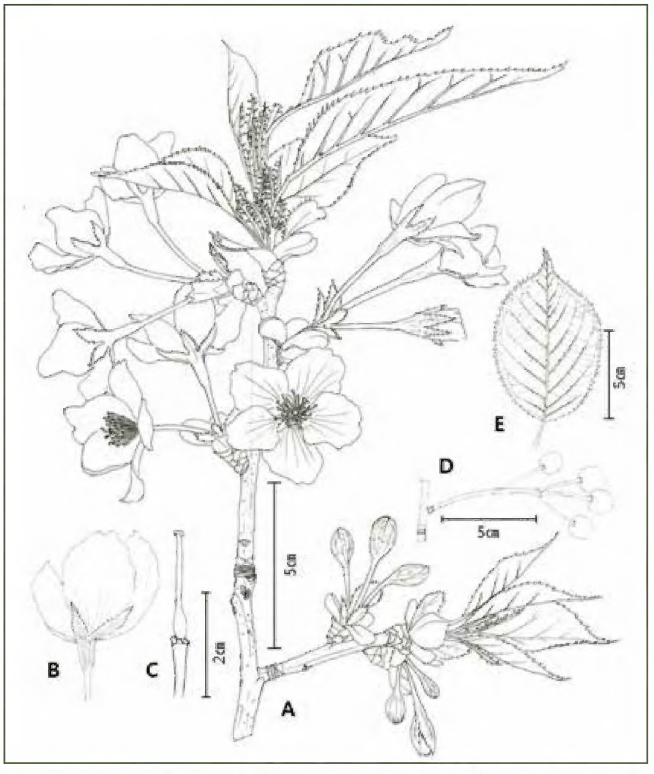

Figure 1. *Prunus speciosa*. A. Habit; B. Flower; C. Pistil; D. Fruit; E. Leaf. Reprinted with permission from Chan-Soo Kim.

Back in the mid-1980's while employed at a landscape company on the south fork of eastern Long Island I noted a large flowering cherry and asked my boss and mentor at the time, a talented arborist and horticulturist named "Doc" Whitmore, which species it was. He answered he thought it was a "bird cherry" but didn't know the scientific name. I suspect now that he was unsure of its identity because usually he freely shared his tree knowledge with me and didn't elaborate on this species. But this cherry, I later came to see, was frequently found on East Hampton properties. Some trees were quite large 24"-30" dbh. Many clearly appeared to have been planted, in street lined rows, with others in a prominent spot on the property. But what seemed evident was that not all were purposely planted, these were rangy trees mostly tucked away in the back corners of the landscape, behind a compost pile or shed, emerging through the top of hedgerows, along edges of woodlots, and in the "wild" lesser maintained areas of the properties. These cherries lay unnoticed until they blossom and reveal themselves.

Fast forward a few decades to April 24th, 2016 when I was driving out towards the Montauk Point Lighthouse and noticed one of Doc's "bird cherries" growing on the side of the highway (Fig. 3). This was plainly not planted as it was on the edge of Camp Hero State Park land growing on the edge of woods along with native trees. I took a sample and once home consulted a few horticultural tree references to try and determine the identity. Which species did Doc mean

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Long Island Botanical Society

Founded: 1986 • Incorporated: 1989

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

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Society News

LIBS gratefully acknowledges the following members for their generous donations:

Marie George, Christine Machtay, Timothy Purtell, Molly Rouzie

LIBS welcomes new Life Members: Dai Dayton from Bridgehampton and Chris Kreussling (aka the Flatbush Gardener) from Brooklyn.

Letter to the Editor, from Patricia Klein: "Thank you for the beautiful article on Roy Latham in the Winter 2024 edition of The LIBS Quarterly Newsletter. His reflections quiet my heart and transport me to the out of doors where I am the happiest. I share his joy and peaceful reflections with gratitude. Happy Spring."

The 2024 LIBS BBQ: Help is needed if LIBS is to continue having its traditional BBQ. During the pre-Covid Era, at least 3 or 4 people were instrumental in making the BBQ a success. Currently, LIBS needs a volunteer to take the bull by the horns and make the BBQ happen this September. If interested, please email Eric Lamont (elamont@optonline.net).

Pressing Plants for Art and Science. Instructor: Daniel Atha. August 25-31, 2024 at Eagle Hill on the coast of eastern Maine. Daniel has been a close friend of LIBS and in this week-long class in scenic Maine he covers the essentials of making museum-quality preserved plant specimens suitable for research, education, and the arts. Students will gain the knowledge and skill to add to existing herbaria or develop one for use as a permanent floristic record, study-aid, or graphic art project. For more info and to register, go online: www.eaglehill.us.

In Memoriam

Bob Gibbons (1949-2024)

Bill Titus (1932 – 2024)

A note from Dottie Titus: "Dear LIBS Friends, Thank you so much for the lovely flowers and the good wishes you have sent my way. You were all such a big part of our long relationships. Such a special time over many years. It was too bad that Covid came in and changed the way we all lived. Bill and I especially looked forward to the carpooling with Barbara Conolly and Zu Proly when she was with us. And who can forget the trips to Newfoundland and the Florida expedition? Thank you for sharing your experiences and knowledge with us all. Fondly, Dottie"

LIBS MEMBERSHIP RENEWALS FOR 2024 ARE DUE

Mail your dues ($25 individual, $30 family) to:

Kathy Gaffney, LIBS Treasurer
590 Concord Avenue
Williston Park, NY 11596

Thank you for promptly renewing your membership

(Prunus speciosa, continued from front cover)

Figure 2. Flowers of *Prunus speciosa*. Photo by Vicki Bustamante, 2023.

by 'bird cherry'? The common name bird cherry has been applied to *Prunus padus* which is a small tree with a 15-50 flowered racemed inflorescence, and also to *Prunus avium* which has flowers in loose umbellate clusters of 1-3. At the time and with the resources before me I felt that *P. avium* best fit the general description of the tree in hand and thus deposited it under label #809 and (incorrectly) as *P. avium* at the New York Botanical Garden's William and Lynda Steere Herbarium. My notes from that specimen label included "East of Camp Hero Road, overhanging Route 27; 8" dbh, ~25 tall; growing with *Lindera benzoin, Kalmia latifolia, Ilex opaca, Acer rubrum, Vitis labrusca*; petals white with pink blush in bud, light fragrance; new leaves green with slight copper tint."

It's like learning a new word . . . afterwards, you hear it all the time. Since then I began noticing this cherry growing all over Montauk as well as in Amagansett, East Hampton, and Southampton. It is found along roadside edges, thickets, woodland borders, and abandoned fields. Because I was not confident in my original 2016 identification I began making collections and studying these naturalized cherries and in 2018 tentatively identified them as *Prunus speciosa*. David Werier subsequently confirmed the identification and added it to the New York State Flora in 2023.

In Montauk there appear to be a few hotspots with high concentrations of *P. speciosa*. One is in the Shepherds Neck area, another is on the west side of Fairview Avenue and Essex Street, and a third (with fewer numbers) is on the south and west sides of Fort Pond. The former two vicinities are areas that experienced significant development in the mid to late 1920s by the entrepreneur Carl Fisher during his grand plan of transforming Montauk into the "Miami of the North." Carl Fisher constructed a tree nursery situated next to his barn which stabled horses (it was later bought by the famous playwright Edward Albee and was transformed into his Foundation's residence for writers and visual artists). According to a promotional booklet his development corporation wrote: "Nurseries already under cultivation are

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Figure 3. *Prunus speciosa* spontaneously occurring along a roadside in Montauk. Photo by Vicki Bustamante, 2023.

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(Prunus speciosa, continued from page 11)

developing the rugged trees and plants to landscape Montauk homes." Could Fisher's nursery stock have included Oshima cherry trees and could they be the parents of the present day naturalized cherries? Additionally, at historic Third House (literally the third house built in Montauk in 1797) there is a giant *P. speciosa* specimen directly behind the building flanking the back stairs of the dining room; the dining room was an addition built circa 1940. This mature tree can potentially be a source of seed as well.

The most commonly confused cherries with *P. speciosa* that I encountered were *P. avium* and *P. serrulata*. To rule these out *P. serrulata* has double pink flowers with flowering occurring two weeks after *P. speciosa*. The cultivar 'Kwanzan' has deep double pink flowers and is one of the most popular cherry cultivar selections in the horticultural trade, at least on the east end of Long Island, but I've not found it where I thought it was naturalized (double flowers are usually sterile). *Prunus avium* features hairy abaxial leaf surfaces and blunt marginal teeth; petals entire, white; sepals are strongly reflexed, entire and blunt versus *P. speciosa* with abaxial leaf surface glabrous, marginal teeth aristate and usually gland tipped; petals emarginate (notched) and the sepals are lanceolate, spreading, and margins toothed. Additionally, *P. avium* sepals are bluntly rounded and strongly reflexed and the hypanthium is urceolate compared to *P. speciosa* which has a tubular hypanthium and lanceolate sepals. During the flowering period of *P. speciosa* there are other commonly seen ornamental cherry species flowering at this same time but in the ~8 years of studying this cherry I have not found any of these naturalized; *Prunus yedoensis* (Yoshino cherry), *P. subhirtella* (Higan cherry), *Prunus serrulata* (Japanese flowering cherry), and *P. sargentii* (Sargent's cherry). The only other naturally occurring spontaneously growing cherry I encounter is *Prunus avium,* which for whatever reason is more common on the North Fork of eastern Long Island. I have included *P. serrulata* in the key because it is the most common cherry species and can sometimes be hard to discern, in some situations, if it is planted or naturalized.

The taxonomy of the cherries has been complicated and confusing due in part to naturally occurring hybridization and species have been the object of the usual lumping and splitting common among taxonomists. According to the Flora of North America "...some Japanese cherry experts now circumscribe *P. serrulata* more narrowly so that it includes only the white-petaled, double-flowered cultivars closely resembling the nomenclatural type. The single-flowered plants that are found escaping rarely and perhaps naturalizing in the flora area have been called *P. lannesiana* (Carrière) E. H. Wilson forma *albida* (Makino) E. H. Wilson or *P. speciosa."* Another synonym is *P. serrulata* var. *lannesiana."*

Botanist and friend Daniel Atha joined me on the weekend of April 21, 2023 to observe the peak flowering of Montauk's *P. speciosa* and to consider the naturalized status of these cherries growing around the hamlet. We concurred that the Oshima cherry is growing spontaneously. It is difficult to estimate how many naturalized trees there are in Montauk but a rough count is about 75. Interestingly, I have noted that *P. speciosa* is quite tolerant of maritime conditions and have seen them thriving and seemingly unfazed 200 meters from the ocean. This is no surprise considering that *P. speciosa* is indigenous to the island of Izu, Japan which is located at a close parallel latitude of 35° N to Montauk's 41°N, and they have evolved under similar harsh coastal conditions as Montauk experiences. Also of note is that underneath a naturalized tree in Southampton were dozens, perhaps hundreds, of seedlings which had germinated the previous year (see photo).

A timely addition to this report occurred recently on April 28, 2024. While conducting a tree survey with my three East Hampton High School senior interns in the Hither Woods State Park we found three *P. speciosa* second-year seedlings in an oak-hickory forest understory. Later, in the Culloden Point Preserve forest we found another seedling. Perhaps we are not seeing young Oshima cherry trees growing to maturity in these forests for the same reason we are not seeing the native tree species regenerating, the heavy deer browse pressure.

Key to three sometimes confused *Prunus* species

1. Flowers double ..... ***P. serrulata***
1. Flowers single;
   2. Abaxial leaf pubescent; hypanthium urceolate; sepals oblong, entire, strongly revolute .....***P. avium***
   2. Abaxial leaf glabrous; hypanthium tubular; sepals toothed, lanceolate, spreading..... ***P. speciosa***

Some noted features and measurements of *P. speciosa* from specimens I collected (Figs. 4, 5, 6): **Tree** 60-90 dm; single trunked, broad topped, wide spreading. **Bark** brownish-gray or reddish-brown with horizontal orangish lenticels; flaking; dull shine. **Twigs** glabrous; tan with prominent round brown lenticels. **Leaves** glabrous, 7-9 pair veins, green, often with a bronze/ copper color when expanding; margin double serrate, aristate & often gland tipped (bulbous), proximal and distal teeth all relatively the same size; shape broad ovate; bases rounded to obtuse; leaf apex aristate to caudate; Petiole with 2 sub-opposite discoid glands. **Flowers** single, white to pale pink, sometimes with dark pink center; flowering with leaf expansion; lightly fragrant to malodorous; petals emarginate, 12-20 mm long: inflorescence 2-4 flowers per corymb, peduncle subtended by 4 large leafy bracts with gland tipped teeth; hypanthium elongate, glabrous, 6- 9 mm long; pedicels 27-28 mm long subtended by small serrated bracts; sepals glabrous, ascending, margins irregularly serrate, usually glandular. **Fruit** glossy purple-black, 1 cm tall x 1 cm wide, tasty; stone round-oval, 7-8 mm.

Figure 4. Fresh fruits of *Prunus speciosa* collected in Montauk. Photo by Vicki Bustamante, 2023.

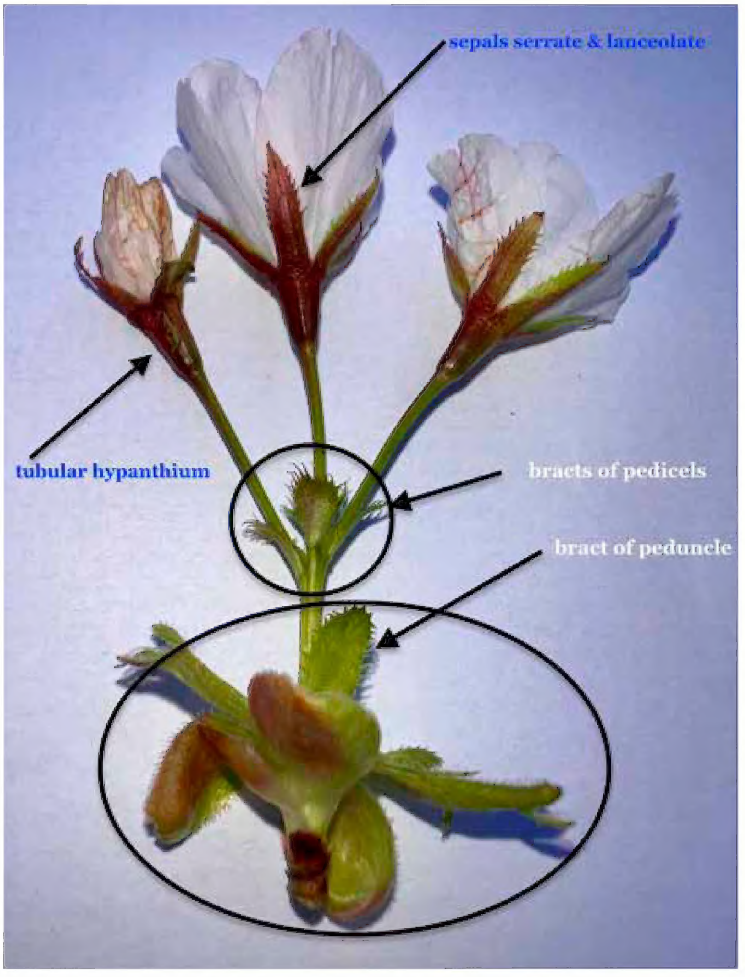

Figure 5. *Prunus speciosa,* highlighing important parts of the plant used when identifying individuals. Photo by Vicki Bustamante, 2023.

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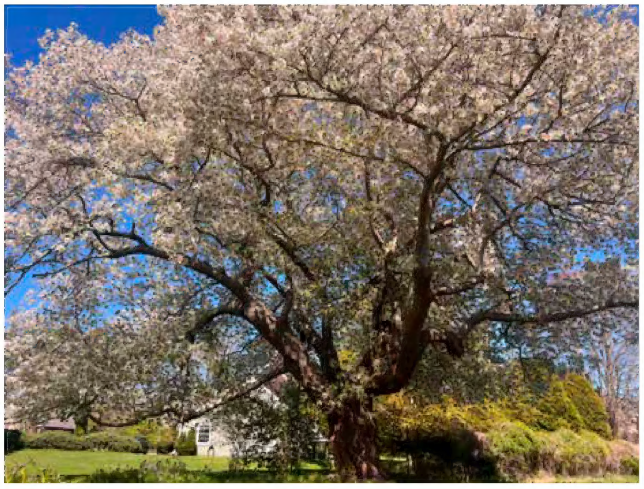
(Prunus speciosa, continued from page 13)

Figure 6. Photographs of *Prunus speciosa*. Top left: leaves; top right: close-up of the tip of a leaf showing the apiculate apex and marginal gland-tipped teeth; middle right: close-up of the base of a leaf showing the two prominent red glands; bottom right: second year seedlings that germinated beneath a parent tree in Montauk; bottom left: large specimen (dbh = 30 inches) planted in the village of East Hampton. Photos by Vicki Bustamante, 2023 & 2024.



Rare Oak Hybrid (*Quercus ×rehderi*) Reinstated in the Flora of New York

Eric Lamont and Carol Johnston

Rehder's oak (*Quercus ×rehderi* Trel.) was excluded from the flora of New York by Werier (2017) because after extensive searches he could not locate a voucher of the hybrid from New York. Historically, Rehder's oak has been reported (sometimes as *Quercus illicifolia* × *Q. velutina*, the two parent species) from New York by House (1924), Mitchell (1986), New York Flora Association (1990), and Mitchell and Tucker (1997, 2003). The hybrid is named in honor of Alfred Rehder (1863-1949), a German-American botanist who worked at the Arnold Arboretum of Harvard University and is generally regarded as the foremost dendrologist of his generation.

In 1986 Carol Johnston collected a voucher of Rehder's oak (Fig. 1) from Napeague, on the South Fork of Long Island, during a Long Island Botanical Society field trip led by Joe Beitel. Joe showed the group three oaks growing side by side in sandy soil along Montauk Highway; the oak on the left was short (bear oak, *Q. illicifolia*), the one on the right was taller (black oak, *Q. velutina*), and the middle one was the hybrid (*Quercus ×rehderi*) and was mid-sized. According to Haines (2011) "the hybrid is best diagnosed using the leaf blades, which are very different between the parental taxa. The plants are frequently shrubby (as in *Q. illicifolia*), but sometimes are more arboreal than is typical for *Q. illicifolia*."

Voucher specimen: USA. New York. Suffolk County: sandy track under power line, N. side of R.R. track, Napeague, June 8, 1986, *C. Johnston 9836*, OBPF [Herbarium, Planting Fields Arboretum, Oyster Bay, NY]. (Fig. 1; 1 of 3 sheets)

Based on the above collection, *Quercus ×rehderi* is reinstated in the flora of New York. Both parent species are common on Long Island where they often grow together and hybrids may be overlooked in the field.

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Figure 1. Voucher of *Quercus ×rehderi* (Fagaceae) collected by Carol Johnston from Napeague, Suffolk Co., NY. Photo by Lois Lindberg, 2024.

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(Field Trips, continued from back cover)

tick precautions. We will meet at the Long Pond Greenbelt Nature Center, and walk through the woods less than 1/2 mile to the ponds.

Registration: Please register online with the New York Flora Association: https://nyflora.org/events-directory/. If you have any questions about the trip before registering, please email coastalplain@nyflora.org.

October 12, 2024 (Saturday) 11am
Big Reed, Montauk, Suffolk Co.
Trip Leader: Vicki Bustamante
Joint trip with the North Shore Land Alliance

Description: The Big Reed area is the jewel of the 1,100 acre Montauk County Park and host to many rare and unusual plants. The hike will pass through some vulnerable ecological communities including a red maple-blackgum swamp, coastal oak-hickory forest and a coastal oak-beech forest. We will overlook Big Reed pond, a pristine 57 acre coastal plain pond without a house, building or road in sight. The area was the last ancestral home of the Montaukett tribe. We will be on the lookout for interesting plants and birds along the way.

Registration: Please register online with the North Shore Land Alliance: https://northshorelandalliance.org/?event=hike-big-reed-montauk&event_date=2024-10-12/.
Space is limited so please register early.

Long Island Botanical Society
PO Box 507
Aquebogue, NY 11931

Field Trips

September 14, 2024 (Saturday) 10am
Oyster Pond, Montauk, Suffolk Co.
Trip Leader: Vicki Bustamante
Joint trip with the New York Flora Association

Description: Oyster Pond is the largest and highest quality example of a coastal salt pond community in New York. Oyster Pond lies within a completely undeveloped watershed in Montauk Point State Park. Due to its proximity to the shoreline, it periodically opens to Block Island Sound by natural processes making it brackish. Oyster Pond is host to many rare and unusual plants which have adapted to survive in this habitat including *Sesuvium maritimum, Chenopodium berlandieri* var. *macrocalycium, Eupatorium torreyanum, Eleocharis parvula*, *Glyceria obtusa, Polygala cruciata, Cyperus filicinus, Juncus brachycarpus, Limosella australis, Viburnum dentatum* var. *venosum, Ptilimnium capillaceum*, and *Carex mitchelliana*. Sturdy walking shoes/boots are recommended, preferably waterproof, as we will be navigating through some wet areas and puddles and shoreline; please bring a hand lens, water, snack/lunch, sunscreen, and take tick precautions.

Registration: Please register online with the New York Flora Association: https://nyflora.org/events-directory/. If you have any questions about the trip before registering, please email montauk@nyflora.org.

September 28, 2024 (Saturday) 10am
Coastal Plain Flora at Crooked Pond, Sag Harbor, Suffolk Co.
Trip Leader: Rich Ring, Chief Botanist, NYS Natural Heritage
Joint trip with the New York Flora Association
Limit: 12 participants

Description: The coastal plain ponds of Long Island are hot spots of rare plant diversity in New York. The complex of ponds at the Long Pond Greenbelt, south of Sag Harbor, has some of the best-preserved examples of this rare habitat. Depending on water levels we will look for several rare sedges at Crooked Pond and vicinity, including species of beakrush (*Rhynchospora*), spikerush (*Eleocharis*), nut sedge (*Scleria*), and umbrella grass (*Fuirena*). Rose coreopsis (*Coreopsis rosea*) and other flowering plants should be present as well. Please bring a hand lens, water, lunch, sunscreen, snacks, and footwear suitable for mud, and take

(Field Trips, continued on page 15)